

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
22 January 2004 (22.01.2004)

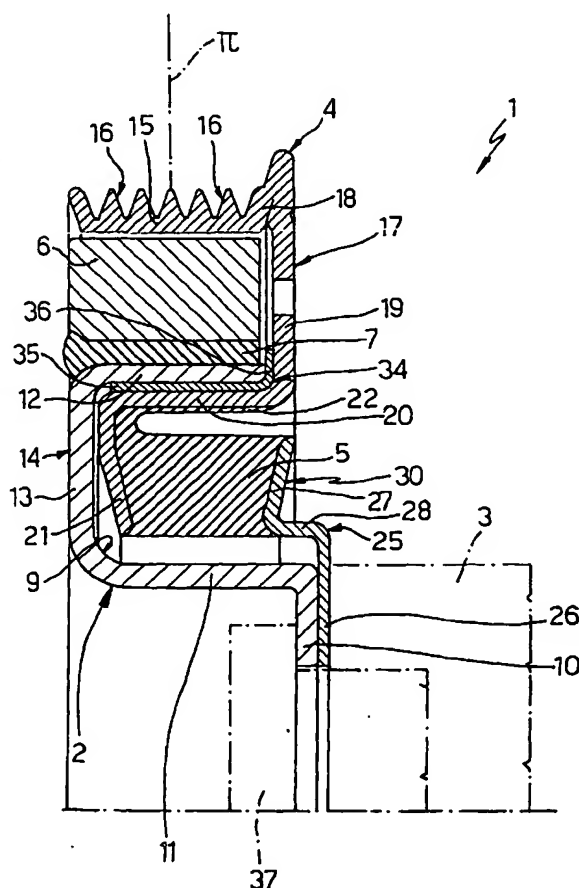
PCT

(10) International Publication Number
WO 2004/007992 A1

- (51) International Patent Classification⁷: **F16F 15/14**, F16H 55/36, F16F 15/126
- (21) International Application Number: PCT/IT2003/000432
- (22) International Filing Date: 10 July 2003 (10.07.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: T02002A000622 16 July 2002 (16.07.2002) IT
- (71) Applicant (for all designated States except US): **DAYCO EUROPE S.R.L.** [IT/IT]; Zona Industriale Vallecupa, I-64010 Colonnella (IT).
- (72) Inventor; and
- (73) Inventor/Applicant (for US only): **RIU, Hervé** [FR/FR]; 14, Le Petit Bois, F-38140 La Murette (FR).
- (74) Agents: **JORIO, Paolo et al.**; c/o Studio Torta S.r.l., Via Viotti, 9, I-10121 Torino (IT).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: AN INTEGRATED PULLEY-TORSIONAL DAMPER ASSEMBLY



(57) Abstract: An integrated pulley-torsional damper assembly (1) comprises a hub (2) designed for being rigidly connected to a drive member (3), a pulley (4) connected to the hub (2) by means of a first ring (5) made of elastomeric material having the function of filter for the torsional oscillations, and an inertia ring (6), connected to the hub (2) by means of a second ring (7) made of elastomeric material, which defines with the inertia ring (6) a damping system. The first elastomeric ring is connected to the hub by means of a coupling flange (25), which can be pack-tightened between an internal annular flange (10) of the hub and the drive member (3), the hub (2) comprising a first cylindrical wall (11) and a second cylindrical wall (12), which are coaxial with respect to one another and define between them an annular cavity (9) housing the first elastomeric ring (5), the external cylindrical wall (12) defining a support for the second elastomeric ring (7).

WO 2004/007992 A1